

Transcript of Episode 011 of the Plants Dig Soil podcast – “Trouble with Bylaw”

Hello! This is Scott Gillespie and welcome to the second season of Plants Dig Soil. In this podcast, you will learn ways to transition from conventional to regenerative practices in agricultural, horticultural, and home gardening systems.

[Transition Music]

Have you run into issues with bylaw on your farm? Maybe it wasn't even bylaw, it was neighbours. You are trying to grow crops and manage your farm regeneratively, but you find others don't agree with the messiness of it all. Perhaps, like me, you live in a town or city. Your yard is in transition to regenerative and natural ways of managing it, but it conflicts with community standards.

My issues started a couple of years ago when I got my first notice from the bylaw officer that my yard was out of compliance. I was issued an order to trim the grass and control the weeds in my front yard and in the back alley that runs along the rear of the property. I'll admit that it had been getting a little out of hand at that point.

For the gardeners, you know what I'm talking about. It seems like you are staying ahead of everything through May and then, like a tidal wave coming to shore, everything takes off and grows exponentially. It's hard to know where to even begin, and with days getting hotter there just isn't the time you had in the spring.

For the farmers, this is your entire growing season – just trying to keep up with what is next. Once seeding is done, and sometimes even as it is still proceeding, there are weeds to control, fertilizer to apply, and if you live in an irrigated area, there is water to manage. The farmyard and the areas surrounding the fields get neglected and soon it is a mess of weeds.

For the agronomists, you are busy giving advice to farmers to help them grow their crops and you find that your yard gets neglected. And then there are the special ones like me that also like to grow a vegetable garden as well.

I didn't really want to cut back the wild area in the front yard because it was so enjoyable watching the neighbourhood cats play there. Our house has a large picture window in the living room that looks out onto the yard – it was sometimes more enjoyable watching out there than watching the television, which is probably how life really should be.

At the time, there were some one-year old neighbourhood cats that were still as exuberant as kittens. I don't know if it was mice or insects that they were chasing in there, but they sure had fun. They would also stalk each other and make a big game of it. If you read Calvin & Hobbes growing up, like I did, it reminded me of when Hobbes was stalking and tackling Calvin and tumbling through the yard. If you're older you might think of Tigger pouncing on Pooh Bear.

I got out my string trimmer and tidied it up, though. I left the plants that I wanted to be there and trimmed back the grass within the wild area. In the lawn area I cut the grass back. It had got too long on me, but I also intentionally leave it long. I keep my lawn longer because a thick lawn chokes out weeds, grows deeper roots, and, consequently, is more resilient to water stress.



My front yard. Slowly coming into being.

This is really important as I live in a semi-arid area east of the Rocky Mountains. Rain comes intermittently. I take pride in the fact that my lawn will stay green for a month or more after the last rain of the spring before browning off. I will only water it again in the fall if there have been no rains to revive it, so it is strong going into winter. If I time it right, I'll only need to cut it once or twice in September and then I have a nice green lawn through most of fall and early winter. My lawn area has shrunk over the years, but I haven't eliminated it. There still needs to be areas for the firepit, to set up a tent, to play in. It also gives a good boundary to the different areas of the yard.

Shifting to the rear of our property, to the alley and the area behind the garage, I trimmed it back as well, though I wasn't as reluctant here because it had turned into a weedy area. At one time I had a monoculture of wild sunflower that took over the area to the sides of the laneway and into the garage. Along the alley, on the fence that borders my vegetable garden, there was a monoculture of hollyhocks. Being a wild population, they were genetically diverse, but they still were monocultures – they naturally took over the areas and forced all other plants out. I had enjoyed the sunflowers because they provided nectar to the bees in the late summer and seeds to the birds in early winter.

Last year I again got my notice in June to cut my grass and trim back the weeds. I was getting a few more of the desirable plants surviving in the front yard but the back was getting to be more of a mess. The monocultures of sunflowers and hollyhocks had broken down and I also discovered a noxious weed back there – field bindweed. The town had put out a notice that it was being found throughout the town and my area was no exception. Somehow it had invaded the town and was taking over.



My monoculture of sunflowers years back.

This is where I'm happy to have tools such as herbicides when I need them. I decided it was time for a reset in the back, so I sprayed out the bindweed and most of the rest of the area. It turned brown and anything new for the rest of the summer was met with herbicide as well. If I were trying to manage this organically, I'd have to try to dig as much of the root out as possible and keep at it for years.

I've heard of a concentrated vinegar being used as an organic herbicide, but I don't have any experience with it. The problem with it is that it just burns the top off – like flame weeding – and so the root can just regrow. Repeated use would weaken the plant and may eventually kill it. It might be better than tilling as you aren't having to disturb the soil and the microbes that live in it. If you have any experience with this please send me an email – scott@plantsdigsoil.com. I'd love to hear what you think of it.

The problem with bindweed is that it is a prolific spreader and even the smallest piece of root will start a new plant. The reason it gets established so well is that it spreads unnoticed in the understory until it explodes and overruns all other plants. It's usually left alone because it has beautiful flowers. If it behaved, it could stay. But the problem is that it likes to dominate an area and doesn't play well with others. In a farm field or a garden, it climbs and wraps itself around everything and makes harvest challenging. It will wrap up in farm equipment and entangle gardeners' hoes. Tilling it in only spreads it more.

My solution once I'd gotten it under control was to plant fall rye. For those of you who have listened to this podcast before you will know, fall rye, sometimes called cereal rye, is one of the key plants that organic and conventional farmers use to suppress weeds and keep a living root in

the soil as long as possible. I've planted it as late as mid October and had it germinate under the snow but it's more ideally planted in September in my area to allow for some growth.



Fall rye still weeks from being ready to be crimped, but forced to be cut back.

Fall rye produces its own herbicide that inhibits germination of almost every other seed around it. The technical name for this is allelopathy. It also grows when most plants won't grow and so can get ahead of them. It will stay green all winter, even though we can get below -25°C (-13°F). In the spring I usually find it growing below the snow as it melts. It chokes out all other plants in the spring as well because it is very aggressive and uses nearly all of the nutrients and water near the surface of the soil.

My plan was to let this grow to pollen shed and crimp it down. Unfortunately, bylaw did not like what they called grass in the back being so long this spring and gave me notice that I was out of compliance. I had to cut it back and it did what farmers and researchers have found – it came back. Had I been able to leave it and crimp it at pollen shed time I may have been able to make suppressive weed cover, but I was not able to do this.

If I had been successful in making the suppressive mat of rye, I'd have spread my pollinator blend over the surface before crimping. In this mix I have white Dutch clover, berseem clover, crimson clover, hairy vetch, and phacelia for flowers and soil building along with some annual ryegrass, tillage radish and sorghum-sudangrass. As it is, I decided to spread it before my last string trimming. I also spread some of the compost that the town makes from the municipal program as a top dress. It looks messy now, but I see the seedlings growing in the understory. I also have some of my sunflower returning – the seeds having sat dormant for years are germinating again. I only hope I have some flowers and nice-looking plants up before bylaw sees it again as out of compliance.

Speaking of compliance, this is where I have issues with the law as it stands. It is subjective, up to interpretation. Swinging back to the front yard, to end this podcast, I asked after the second notice this year: What were the weeds that they were talking about? The answer was that it was unsightly plants. What height was too tall? It was when the grass or other plants look overgrown.

In my front yard the uplands larkspur, which is a native plant to the area, looks tall and gangly as it grows in the spring. But once it starts to flower it is beautiful. Being a diverse genetic collection of plants, it is at different heights, has different colours of flowers, and flowers over a long period of time. I'm sure it will be seen as unsightly as I let the stalk mature but I will not be cutting it back. I want to collect and distribute the seeds that they produce to the rest of the wild area and perhaps to other areas of the yard.

I'm curious – do you have similar stories of run-ins with bylaw? Or neighbours that asked you directly to clean up your yard, or your fields? Maybe it was more subtle – you know what everyone was talking about at the coffee shop in the moments before you arrived. Send me an email or message me on Twitter or LinkedIn. The links will be in the show notes.

[Transition Music]

Remember to get local advice before acting upon this information. If you don't know who to talk to, get a hold of me and I'll help you find someone. If you're in my local area and are in need of help, contact me. It's always free to chat. If we get to the point that the scope broadens to consulting work, we can work out a plan that fits your budget.

Would you like to keep up with me through a free monthly newsletter? Go to www.plantsdigsoil.com/contact and select the newsletter option. If you haven't subscribed to the podcast yet please make sure you do that in your favourite app. If you're a long-time listener – will you consider leaving me a review? This helps others discover the podcast. If you know of someone that would enjoy this, please be sure to share it with them directly or through your social networks.

If you're still listening, you're probably like me and like to know what the catch is. Why am I putting out this information for free? The reason is that I love to learn, and I love to share the information. My knowledge has been built up from experiences in my own garden, advising farmers and agronomists in my consulting business, and from reading the latest books and articles on agronomy and regenerative agriculture.

I have a B.Sc. (Agr.) with an agronomy focus and a M.Sc. with a focus on Plant Science. Beyond my formal education, I have attained, and maintained, my Certified Crop Advisor designation and am a member in good standing with the Alberta Institute of Agrologists.

Nearly everything I talk about is from free resources posted to university and research organization websites. Books that used to be hard to track down are available to buy or borrow for nearly anyone with an ereader. The information is out there – sifting through it all is what takes the time.

I make my living entirely from consulting. I don't sell any products, software, or systems. I strive to be as independent and as unbiased as possible so I can provide the best advice to my clients and help as many people as possible move from conventional to regenerative agriculture.

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